

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Robinson et al.                      Art Unit : Unknown  
Serial No. : Not Yet Assigned                      Examiner : Unknown  
Filed : Herewith  
Title : IMMUNIZATION BY INOCULATION OF DNA TRANSCRIPTION UNIT

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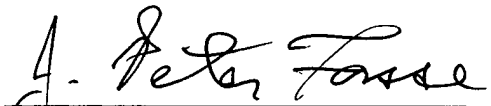
INFORMATION DISCLOSURE STATEMENT

Under 35 USC §120, this application relies on the earlier filing date of application serial number 08/187,879, filed on January 27, 1994. The references listed on the attached form PTO-1449 were submitted to and/or cited by the Office in the prior application and, therefore, copies are not provided in this application.

This statement is being filed with the application. Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 07917-217002.

Respectfully submitted,

Date: 1-22-04

  
J. Peter Fasse  
Reg. No. 32,983

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

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Substitute Form PTO-1449 (Modified)  <b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07917-217002	Application No.
	Applicant Robinson et al.		
	Filing Date January 22, 2004	Group Art Unit	

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,722,848	02/02/1988	Paoletti et al.			
	AB	5,693,622	12/02/1997	Wolff et al.			
	AC	5,703,055	12/30/1997	Felgner et al.			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AD	WO 89/07140	10/Aug/1989	WIPO				
	AE	WO 93/19183	30/Sep/1993	WIPO				
	AF	WO 90/11092	04/Oct/1990	WIPO				
	AG	WO 86/00930	13/Feb/1986	WIPO				
	AH	WO 86/07593	31/Dec/1986	WIPO				
	AI	WO 92/01045	23/Jan/1992	WIPO				
	AJ	WO 90/02803	22/Mar/1990	WIPO				
	AK	WO 90/02797	22/Mar/1990	WIPO				
	AL	0292879 A3	30/Nov/1988	EPO				
	AM	21666349 A	08/May/1986	UK				
	AN	WO 93/17706	Sept/1993	WIPO				
	AO	WO 95/20660	03/Aug/1995	WIPO				
	AP	WO 92/08789	29/May/1992	WIPO				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AQ	Barry, et al., "Production of Monoclonal Antibodies by Genetic Immunization", <i>BioTechniques</i> 16(4):616-619 (1994)
	AR	Brown, et al., "Assessment of Retrovirus-Expressed Nucleoprotein as a Vaccine against Lethal Influenza Virus Infections of Chickens", <i>Avian Diseases</i> 36:515-520 (1992)
	AS	Butini, L., et. al., "Comparative Analysis Of HIV-Specific CTL Activity In Lymphoid Tissue And Peripheral Blood," <i>J. Cell Biochem.</i> 18B:147 (1994)
	AT	Cheng SM, et al., "Coexpression of biologically active simian immunodeficiency virus (SIV) Rev and Env in an SV40 system: the SIV rev gene regulates env expression," <i>Virology</i> 177(2):816-9 (1990)

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EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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	AU	Cohen OJ., et al., "HIV/AIDS in 1998--gaining the upper hand?" <i>JAMA</i> . 280(1):87-8 (1998)
	AV	Cox, et al., "Bovine Herpesvirus 1: Immune Responses in Mice and Cattle injected with Plasmid DNA", <i>J. of Virol.</i> 67(9):5664-5667 (1993)
	AW	Davis, et al., "Direct Gene Transfer into Skeletal Muscle In Vivo: Factors Affecting Efficiency of Transfer and Stability of Expression", <i>Human Gene Therapy</i> 4:151-159 (1993)
	AX	Davis, et al., "DNA-Based Immunization Induces Continuous Secretion of Hepatitis B Surface Antigen and High Levels of Circulating Antibody", <i>Human Molecular Genetics</i> 2(11):1847-1851 (1993)
	AY	Davis, et al., "Plasmid DNA Is superior to Viral Vectors for Direct Gene Transfer into Adult Mouse Skeletal Muscle", <i>Human Gene Therapy</i> 4:733-740 (1993)
	AZ	Eisenbraun et al., "Examination of Parameters Affecting the Elicitation of Humoral Immune Responses by Particle Bombardment-Mediated Genetic Immunization", <i>DNA and Cell Biology</i> 12(9):791-797 (1993)
	AAA	Fooks AR, et al., "High-level expression of the measles virus nucleocapsid protein by using a replication-deficient adenovirus vector: induction of an MHC-1-restricted CTL response and protection in a murine model," <i>Virology</i> 210(2):456-65 (1995)
	ABB	Fynan, et al., "DNA Vaccines: Protective Immunizations by Parenteral, Mucosal, and Gene-Gun Inoculations", <i>Proc. Natl. Acad. Sci. USA</i> 90:11748-11482 (1993)
	ACC	Fynan, et al., "Use of NDA Encoding Influenza Hemagglutinin as an Avian Influenza Vaccine", <i>DNA and Cell Biology</i> 12(9):785-789 (1993)
	ADD	Gardner, M.B., "Simian and feline immunodeficiency viruses: animal lentivirus models for evaluation of AIDS vaccines and antiviral agents", <i>Antiviral Research</i> 15:267-286 (1991)
	AEE	Gardner, M.D., "SIV Infection of Macaques: A Model for Aids Vaccine Development", 21 <sup>st</sup> Congress of the IABS, Annecy, France (1989)
	AFF	Gelder CM, et al., "Human CD4+ T-cell recognition of influenza A virus hemagglutinin after subunit vaccination," <i>J Virol.</i> 70(7):4787-90 (1996)
	AGG	Gilboa E., et al., "Gene therapy for infectious diseases: the AIDS model," <i>Trends Genet.</i> 10(4):139-44 (1994)
	AHH	Glaser, V., <i>Genetic Engineering News</i> 16:6 (1996)
	AII	Haynes BF, "Scientific and social issues of human immunodeficiency virus vaccine development," <i>Science</i> 260(5112):1279-86 (1993)
	AJJ	Hoffenbach A., et al., "Unusually high frequencies of HIV-specific cytotoxic T lymphocytes in humans," <i>J Immunol.</i> 142(2):452-62 (1989)
	AKK	Hunt, et al., "Retrovirus-Expressed Hemagglutinin Protects against Lethal Influenza Virus Infections", <i>J. of Virol.</i> 62(8):3014-3019 (1988)
	ALL	Huylebroeck, et al., "Viral delivery systems for Heterologous Antigens and Epitopes", <i>Technological Advances in Vaccine Development</i> 84:279-293 (1988)
	AMM	Johnson, et al., "SIV Infection of Macaques as a Model for AIDS Pathogenesis", <i>Intern. Rev. Immunol.</i> 8:55-63 (1992)
	ANN	King, "Viral gene delivery technique may improve on HIV and other vaccines", <i>Biotechnology News</i> 11(28):5 (1991)
	AOO	Kuby, J., "Immunology," <i>W.H. Freeman &amp; Co., NY</i> (1991)

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	APP	Ledley FD, "Clinical considerations in the design of protocols for somatic gene therapy," <i>Hum Gene Ther.</i> 2(1):77-83 (1991)
	AQQ	Liu et al., "Immunization with DNA Encoding a Conserved Internal Viral Protein Results in Protection from Morbidity and Mortality Due to Challenge with Influenza A in Mice", Abstracts of papers presented 1992 meeting on <i>Modern Approaches to New Vaccines Including Prevention of AIDS</i> , Cold Spring Harbor Laboratory, New York, September 16-20 1992
	ARR	McClure, et al., "Nonhuman Primate Models for Evaluation of AIDS Therapy", <i>Annals New York Academy of Sciences</i> 616:287-98 (1990)
	ASS	Montgomery, et al., "Heterologous and Homologous Protection Against Influenza A by DNA Vaccination: Optimization of DNA Vectors", <i>DNA and Cell Biology</i> 12(9):777-783 (1993)
	ATT	Nable, et al., "Direct Gene Transfer for Immunotherapy and Immunization", <i>Trends in Biotechnology</i> 11(5):211-215 (1993)
	AUU	Parker, et al., "Intramuscular Vaccination of Plasmid DNA Containing Viral Antigens Provides Protection Against a Lethal Viral Challenge", Abstracts of papers presented 1992 meeting on <i>Modern Approaches to New Vaccines Including Prevention of AIDS</i> , Cold Spring Harbor Laboratory, New York, September 16-20 1992
	AVV	Rekosh D., et al., "Coexpression of human immunodeficiency virus envelope proteins and tat from a single simian virus 40 late replacement vector," <i>Proc Natl Acad Sci USA</i> 85(2):334-8 (1988)
	AWW	Rhodes et al., "Injection of Expression Vectors Containing Antigen Genes Induce Cellular and Humoral Immunity to the Antigen", Abstracts of papers presented 1992 meeting on <i>Modern Approaches to New Vaccines Including Prevention of AIDS</i> , Cold Spring Harbor Laboratory, New York, September 16-20 1992
	AXX	Rhodes et al., "A Novel Method of Inducing Cellular and Humoral Immunity to HIV GP120 Protein by DNA Injection", Abstracts of papers presented 1992 meeting on <i>Modern Approaches to New Vaccines Including Prevention of AIDS</i> , Cold Spring Harbor Laboratory, New York, September 16-20 1992
	AYY	Robinson, et al., "Protection Against a Lethal Influenza Virus Challenge by Immunization with a Hemagglutinin-Expressing Plasmid DNA", <i>Vaccine</i> 11(9):957-960 (1993)
	AZZ	Tang, et al., "Genetic Immunization is a Simple Method for Eliciting an Immune Response", <i>Nature</i> 356:152-154 (1992)
	AAAA	Townsend AR., et al., "Cytotoxic T cell recognition of the influenza nucleoprotein and hemagglutinin expressed in transfected mouse L cells," <i>Cell</i> 39(1):13-25 (1984)
	ABBB	Ulmer et al., "Heterologous Protection Against Influenza by Injection of DNA Encoding a Viral Protein", <i>Science</i> 259:1745-1749 (1993)
	ACCC	Wang et al., "Genetic Immunization: A Novel Method for Vaccine Development Against HIV", Abstracts of papers presented 1992 meeting on <i>Modern Approaches to New Vaccines Including Prevention of AIDS</i> , Cold Spring Harbor Laboratory, New York, September 16-20 (1992)
	ADDD	Wang et al., "DNA Inoculation Induces Neutralizing Immune Responses Against Human Immunodeficiency Virus Type 1 in Mice and Nonhuman Primates", <i>DNA and Cell Biology</i> 12(9):799-805 (1993)
	AEEE	Watanabe, et al., "Induction of Antibodies to a $\kappa$ V Region by Gene Immunization", <i>J. of Immunol.</i> 151(5):2871-2876 (1993)
	AFFF	Webster, et al., "Efficacy of Nucleoprotein and Haemagglutinin Antigens Expressed in Fowlpox Virus as Vaccine for Influenza in Chickens", <i>Vaccine</i> 9:303-308 (1991)
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	AGGG	Weiss, R., <i>Washington Post</i> , p. A2 (April 1997)
	AHHH	Wolff, et al., "Direct Gene Transfer into Mouse Muscle in Vivo", <i>Science</i> <u>247</u> :1465-1468 (1990)
	AIII	Yankauckas, et al., "Long-Term Anti-Nucleoprotein Cellular and Humoral Immunity is Induced by Intramuscular Injection of Plasmid DNA Containing NP Gene", <i>DNA and Cell Biology</i> <u>12(9)</u> :771-776 (1993)
	AJJJ	Zinkernagel, R., "Fundamental Immunology," 3 <sup>rd</sup> Ed., Ed. W.Paul, Raven Press, Ltd., NY, p.1232 (1993)

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